

L 00761-66 EWT(1)/EWT(m)/EWF(t)/EWP(b) IJF(c) JD

ACCESSION NR: AP5013476

UR/0185/65/010/005/0538/0542

AUTHOR: Vyshnevs'kyi, V. N. (Vishnevskiy, V. N.); Pidzyraylo, M. S. (Pidzyraylo, M. S.)

TITLE: Photoluminescence excitation spectra of NaCl and KCl single crystals activated by oxygen-containing impurities

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 10, no. 5, 1965, 538-542

TOPIC TAGS: photoluminescence, single crystal, excitation spectrum, absorption spectrum, sodium chloride, potassium chloride, crystal impurity

ABSTRACT: Photoluminescence excitation spectra were studied in NaCl and KCl single crystals activated by CO<sub>2</sub>, NO<sub>2</sub> and NO impurity ions. The study was made in the -130 to +120°C temperature range. The activating ion content varied from 0.01 to 5 wt. %. The absorption spectra of the specimens were taken. It was found that the excitation spectra of these crystals are made up of two bands: 200-215 mμ and 260-265 mμ. The possible nature of these bands is discussed. Orig. art. has: 4 figures.

ASSOCIATION: L'vivs'kyi derzhuniversytet im. Iv. Franka (Lvov State University)

SUBMITTED: 29Jun64

ENCL: 04

SUB CODE: SS, OP

NO REF SOV: 003

OTHER: 009

Card 1/5

L 00761-66

ACCESSION NR: AP5013476

ENCLOSURE: 01

0

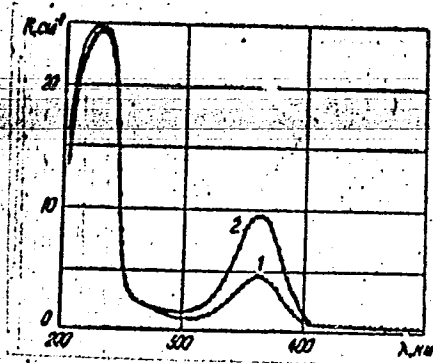


Fig. 1. Absorption spectra of KCl single crystal activated by  $NO_3^-$  (curve 1) and  $NO_2^-$  (curve 2) at room temperature.

Card 2/5

L 00761-66

ACCESSION NR: AP5013476

ENCLOSURE: 02

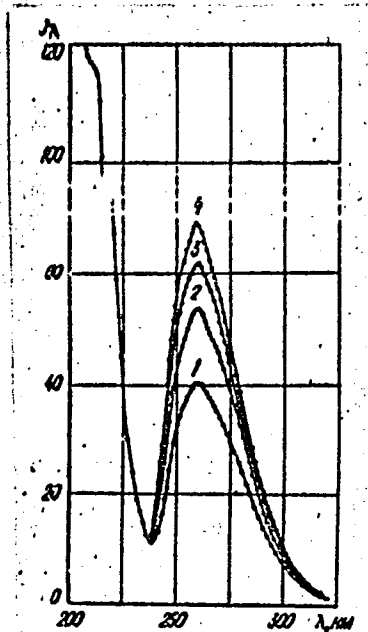


Fig. 2. Photoluminescence excitation spectra of KCl single crystal activated by  $\text{NO}_3^-$ : 1-- room temperature; 2-- $-3^\circ\text{C}$ ; 3-- $-30^\circ\text{C}$ ; 4-- $-130^\circ\text{C}$ .

Card 3/5

L 00761-66

ACCESSION NR: AP5013476

ENCLOSURE: 03

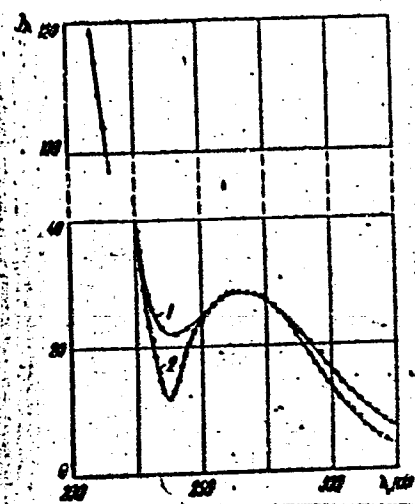


Fig. 3. Photoluminescence excitation spectra of NaCl single crystal activated by CO<sub>3</sub><sup>2-</sup> (curve 1) and NO<sub>3</sub><sup>-</sup> (curve 2) at room temperature.

Card 4/5

L 00761-66

ACCESSION NR: AP5013476

ENCLOSURE: 04

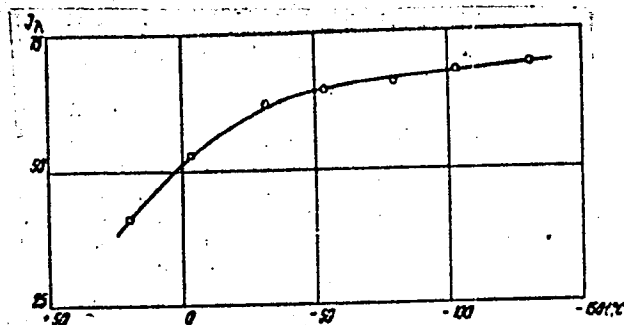


Fig. 4. Photoluminescence intensity as a function of temperature in a KCl single crystal activated by  $\text{NO}_3^-$  for excitation in the 260  $\text{m}\mu$  region.

Card 5/5

VISHNEVSKIY, V.N.

Box and enclosed in quartz cassettes. These were lowered into liquid  
and investigations were carried out in a spectrometer set-

Card 1/2

... optical structureless band is observed at 432 nm). At an activator concentration of about  $3.7 \times 10^{-4}$  mole Tl/mole NaI two maxima

may be due to the  $^3P_1 \rightarrow ^3S_0$  and  $^3P_0 \rightarrow ^3S_0$  transitions and the probability of the latter increases with activator concentration. Orig.

ASSOCIATION: L'vivs'kiy derzhuniversitet im. Iv. Franka [L'vovskiy gosuniversitet im. I. Franko] (L'vov State University)

VISHNEVSKIY, V.N. [Vyshnevs'kyi, V.N.]; VUS, Ya.M.; KULIK, L.N. [Kulyk.  
L.M.]; MARCHUK, Ye.P. [Marchuk, IE.P.]; ROMANYUK, N.A. [Romaniuk.  
M.O.]

Reflection spectra in the vacuum region of the spectrum.  
Ukr. fiz. zhur. 10 no.2:222-223 F '65. (MIRA 18:4)

1. L'vovskiy gosudarstvennyy universitet im. I. Franko.



BRILINSKIY, M.I. [Brylins'kyi, M.I.]; VISHNEVSKIY, V.N. [Vyshnevs'kyi, V.N.];  
PIDZYRAYLO, N.S. [Pidzyrailo, M.S.]; SOLOV'YEVA, Yu.N. [Soloviova,  
IU.M.]

Absorption capacity of synthetic rubies in the region of a  
resonance doublet. Ukr. fiz. zhur. 10 no.4:427-431 Ap '65.  
(MIRA 18:5)

1. L'vovskiy gosudarstvennyy universitet im. Iv. Franko.

VISHNEVSKIY, V.N.; PIDZYRAYLO, N.S.; SOLOV'YEVA, Yu.N.

Temperature dependence of the absorption capacity of synthetic  
ruby in the region of a resonance doublet. Opt. i spektr. 18  
no.3:517-520 Mr '65. (MIRA 18:5)

ACCESSION NO: AIN 1111

AUTHOR: YASHNEVSKIY, V. V.

TITLE: Temperature dependence of the birefringence of ammonium dihydrophosphate crystals 21

SOURCE: Optika i spektroskopiya, v. 18, no. 5, 1965, 838-841

TOPIC TAGS: ammonium dihydrophosphate, birefringence, dispersion, refractive index, temperature dependence

ry distribution in the spectrum. The sample is 1.00 mm thick, cut parallel to the

over. Spectral reference lines were produced with a mercury lamp. The temperature dependence of the dispersion of the sample was investigated from the spectrograms of Fresnel diffraction, the visually determined temperature shift of one of the extrema of the diffraction pattern and the coefficient of expansion of the sample. The results have shown that with the A.P.

ASSOCIATION: none

SUBMITTED: 20Mar64

NO REF SOV: 003

ENCL: 00

OTHER: 005

SUB CODE: OP

ATD PRESS: 4009

Card 2/2

L 45731-65 EWT(1)/EWA(h) Feb JS

UR/0000/64/000/000/0091/0094

ACCESSION NR: AT5009630

AUTHOR: Vyshnevskyy, V. N. (Vishnevskiy, V. N.); Shybystyy, O. M. (Shibistyy, A. N.)

TOPIC: Photoelectric polarimeter

SOURCE: Lvov. Universitet. Pytannya fizyky tverdogo tila (Problems in solid physics)

TOPIC TAGS: luminescence, light yield, luminescence anisotropy, polarization measurement, photoelectric polarimeter



E 45731-65

ACCESSION NR: AT5009630

ENCLOSURE: 01

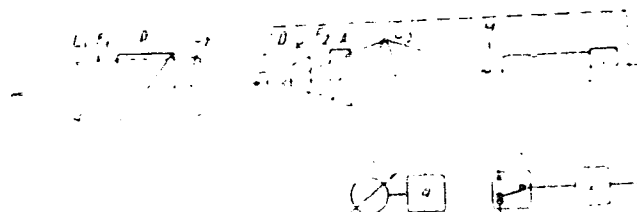


Fig. 1. Optical and electrical setup for the study of luminescence.

1 - Photomultiplier, 2 - amplifier, 3 - voltmeter, 4 - switch, 5 - power source.  
L - lens, F - filter, P - polarizer, O - luminescent object

Card 3/3

42754-12  
ACCESSION NR: AP5011068

UR/0125/65/010/004/0421/0431

AUTHOR: Brylyns'kyi, M. I. (Brylynskiy, M. I.); Vishnevskiy, V. N. (Vishnevskiy, V. N.); Pidzyraylo, M. S. (Pidzyraylo, M. S.); Solov'yova, Yu. M. (Solov'yeva, Yu. M.)

TITLE: Absorption of synthetic rubies in the region of the resonance doublet

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 10, no. 1, 1965, 427-431

TOPIC TAGS: synthetic ruby, resonance doublet, line width, doublet spacing, temperature dependence, chromium impurity

ABSTRACT: The absorption spectra of synthetic rubies were investigated in the region of the resonance doublet, for a chromium impurity content variation from 0.01 to 0.1%. The results of the investigation were used to determine the concentration of chromium impurity in synthetic rubies.



L 45754-65

ACCESSION NR: AP5011068

2-4% accuracy, and could be used for the chromium concentration, and  $\alpha$  is a constant coefficient.  $\beta$  is the chromium concentration, and  $\alpha$  is a constant coefficient. The dependence of the line half-width was found to be  $\beta = 6900 + \alpha \ln T$ , where  $\alpha = 26.8 \text{ \AA}$  and  $\beta = 0.0021 \text{ deg}^{-1}$ . This applies to the temperature range from -195 to +500. Above this temperature the dependence of the line half-width is given by formula 1. [02]

Im. 1. [unclear] [unclear] [unclear]

sup. [unclear] [unclear] [unclear]

NO REF SOV: 001

OTHER: 004

Card 2/2

VISHNEVSKIY, V.N. [Vyshnevs'kiy, V.N.]; GNYP, R.G. [Hnyp, R.H.];  
STEFANSKIY, I.V. [Stefans'kiy, I.V.]

Temperature dependence of the refractive capacity of NaI--Tl  
single crystals. Ukr. fiz. zhur. 9 no.8:867-869 Ag '64.  
(MIRA 17:11)

1. L'vovskiy gosudarstvennyy universitet im. I. Franko.

11D

Increasing seed production of sugar beets. V. P. Yuhnevskiy. *Sukhar* 18, No. 4-6, 27-9(1940); Chem. Zvezd. 1940, II, 3715; cf. C. A. 35, 4804<sup>a</sup>.—Mobile N compds. of the sugar beet play an important role in seed formation. Thinning (Ainslie) leads to a decrease in the so-called "harmful N" and to a decreased seed production (up to 40% in single beets, av. 23%), diminished germinating power of the seed (up to 14%, av. 6-7%), and decreased amt. of mobile carbohydrates and catalase. The no. of small knolls and the cellulose content of the beets increase by selecting beets with a small "harmful N" content. Some sugar-rich varieties react in the M. Hensch.

VISHNEVSKIY, V.P.

"Mikhailovskiy Pereval" state farm struggles for the carrying out of the decisions of the March (1962) Plenum of the Central Committee of the CPSU. Kons.i ov.prom. 17 no.10:18-21 0  
'62. (MIRA 15:9)

1. Sovkhoz "Mikhaylovskiy pereval".  
(Krasnodar Territory--State farms)  
(Fruit culture)

USSR/Cultivated Plants - Fruits. Berries.

M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53778

Author : Vishnevskiy, V.P.

Inst : -

Title : Orchard Irrigation

Orig Pub : Sad i ogorod, 1956, No 5, 55-58

Abstract : On the basis of experimentation made by the Dagestan Canning Trust, a new system of orchard irrigation is recommended. The irrigation furrows are cut with a five-gang P-5-35 plow with the 2 and fourth gangs removed. Along with this, the mineral fertilizers and animal manure can be applied simultaneously. After watering, the cut furrows are disked across with a garden disk harrow. -- K.P. Garina

Card 1/1

VISHNEVSKIY, V.P.

Tomato culture on the "Horodnyi Veleten'" state farm. Kons. 1  
ov. prom. 14 no.6:32-35 Je '59. (MIRA 12:8)

1. Khersonskoye oblastnoye upravleniye sel'skogo khozyaystva.  
(Kherson Economic Region--Tomatoes)

VISHNEVSKIY, V. P.

V. P. Vishnevskiy, "The Quality of Catalase in the Beet Root, and the Resistance of Sugar Beets to Botrytis cinerea during Storage," Biokhimiia, vol. 5, no. 4, 1940, pp. 408-416. 385 B:23

SO: Sira S1 90-53, 15 Dec 1953

Biochemical Lab., Ivanov Selection Station Ukr SSR.

NORDEN, A.P.; VISHNEVSKIY, V.V.

Complex representation of invariants of a four-dimensional  
Riemann space. Izv.vys.ucheb.zav.; mat. no.2:176-182 '59.  
(MIRA 12:5)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-  
Lenina.

(Calculus of tensors)



1. KIRICHENKO, F. G. : IL'ICHYEVA, N. V. : VISHNEVSKIY, V. V.
2. USSR (600)
3. Wheat - Ukraine
4. Selection of wheat varieties for irrigation conditions in the southern Ukraine. Sel.  
1 sem. 20 No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

VISHNEVSKIY V. V.

3(7)

PHASE I BOOK EXPLOITATION

SOV/2384

Konferentsiya po agrometeorologii i agroklimatologii Ukrainakoy SSR  
Materialy konferentsii (Material of the Conference on Agricultural  
Meteorology and Climatology of the Ukrainian SSR) Leningrad,  
Gidrometeoizdat, 1958. 247 p. Errata slip inserted. 700 copies  
printed.

Sponsoring Agencies: USSR. Glavnoye upravleniye gidrometeorologicheskoy i atmosfery Ukrainakoy SSR. Ministerstvo sel'skogo khozyaystva, Ukrainaklyy nauchnyy tsentr, Gidrometeorologicheskyy in-stitut, and Ukrainakaya akademiya sel'skobyaystvennykh nauk.

Resp. Ed.: G.P. Prikhod'ko; Ed.: V.D. Piskarevskaya; Tech. Ed.: M.I. Braynina.

PURPOSE: This book is intended for agriculturists, agrometeorologists, and instructors in related vuzes.

COVERAGE: This collection of articles deals with problems in agricultural meteorology in the Ukraine. Among the topics discussed are: wintering, planting time for winter crops, corn cultivation, potato degeneration, moisture supply, and adverse weather factors. References accompany individual articles.

# Material of the Conference (Cont.)

SOV/2384

Sugar Beets] Soil Water Conditions in Beet Crop Rotation 111

Vishnevskiy, V.V. [Odessa Agr. Station] Moisture Reserves for Winter Wheat in the Southern C-Steppe Region and the Importance of the Moisture Providing Irrigation 117

Buchinskii, I. Ya. [Ukrainian Scientific Research Hydromet. Institute] Climatic Study of Subtropicals (Dry Winds) in the Ukraine 128

Kozova, Ye. A. [Ukrainian Scientific Research Hydromet. Institute] Rainless Periods in the Ukraine 141

Karotkaya, V.G. [Odessa Hydromet. Institute] Rainless and Wet Periods in the Pribichernomorskaya (Black Sea) Steppe 151

Paul'ko, Ye. A. [Ukrainian Scientific Research Institute for Forestry and Agroforestry] Effective Zones of Shelter Belts 155

Dubinskii, G.P. [Dneprov State University] Microclimate of Irrigated Lands 169

Rudakovych, A.V. [Ukrainian Scientific Research Hydromet. Institute] Microclimatic Study of Ukrainian Foothills 176

Golitsyn, I.A. [Main Geophysical Observatory] Compiling Detailed Microclimatic Maps 182

Rukhman, V.P. [State Hydrological Institute] Devices and Methods for Measuring Evaporation from Cultivated Fields 185

Romanov, V.Y. [State Hydrological Institute] Determining Evaporation from Drained and Non-Drained Swamps by the Heat-Balance Method 193

Kopachevskaya, M.E. Autumn and Spring Frosts in the Ukraine 202

Shapovalova, S.A. [Professor, Ukrainian Scientific Research Hydromet. Institute] Climatic Conditions of Corn Cultivation in the Ukraine 214

Rudenko, A.I. [All-Union Institute of Crop Science] The Effect of Climatic Conditions on the Degeneration of Potatoes and the Appearance of Phytophthora (Parasitic Fungi) 230

A suggestion of the Scientific Methodology Council of the Ukrainian Department of Agriculture 243

243

MOROZOV, Nikolay Viktorovich, doktor tekhn. nauk; ARBUZOV, Nikolay Terent'yevich, kand. tekhn. nauk; GRIGOROV, Vasiliy Lukich kand. tekhn. nauk [deceased]; KALISHUK, Aleksandr Luk'yanovich, kand. tekhn. nauk; KURBATOV, Dmitriy Ivanovich, kand. tekhn. nauk; PITYUGIN, Mikhail Semenovich, kand. tekhn. nauk; KHUTORYANSKIY, Aleksandr Abramovich, kand. tekhn. nauk; SHERENTSI, Aleksandr Abramovich, kand. tekhn. nauk; LAVRIK, Gennadiy Ivanovich, arkh. MALERA, Georgiy Il'ich, inzh.; PINSKIY, Ye'im Aronovich, inzh.; SHKLYAR, Aleksandr Samoylovich, inzh.; BERGER, K.V., red.; VISHNEVYY, V.V., red.; ISHCHENKO, N.S., red.

[Manual on civil engineering] Spravochnik po grazhdanskomu stroitel'stvu. Izd.5., perer. i dop. Kiev, Budivel'nyk, 1965. 2 v. (MIRA 18:2)

VISHNEVSKIY, V.V.

Complex structures of a class of Kähler-Rashevskii spaces. Dokl.  
AN SSSR 149 no.2:233-236 Mr '63. (MIRA 16:3)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-Lenina.  
Predstavleno akademikom A.N.Kolmogorovym.  
(Spaces, Generalized) (Matrices)

LUKER'IN, Andrey Andrianovich; VISHNEVYY, V.V., red.; BERGER,  
K.B., red.

[Geodetic tables of coordinate increments, elevations,  
circular curve elements, and square roots of numbers]  
Geodezicheskie tablitsy prirashchenii koordinat, pre-  
vysheni, elementov krugovykh krivyykh i kvadratnykh  
kornei iz chisel. Kiev, Budivel'nyk, 1965. 130 p.  
(MIRA 18:10)

VISHNEVSKIY, V. V., CAND TECH SCI, "INVESTIGATION OF  
MAGNETIC CIRCUITS OF TELEPHONE AND MINATURE CONTROL RE-  
LAYS." LENINGRAD, 1961. (MIN OF COMMUNICATIONS USSR,  
LENINGRAD <sup>Electrical Engineering</sup> ~~ELECTROTECHNICAL~~ INST OF COMMUNICATIONS IM PROF  
M. A. BONCH-BRUYEVICH). (KL, 3-61, 214).

16(1)

AUTHORS: Vishnevskiy, V.V., and Norden, A.P.

SOV/140-59-2-17/30

TITLE: On the Complex Representation of the Invariants of a Four-Dimensional Space (O kompleksnom predstavlenii invariantov chetyrekhmernogo rimanova prostranstva)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1959, Nr 2, pp 176-182 (USSR)

ABSTRACT: The complex representation of the tensors of the Riemannian space  $V_4$  as it is described in the papers of A.P. Norden [Ref 1, 2] is used<sup>4</sup> in order to determine the base of a complete second order system of invariants for the  $V_4$ . The obtained results are essential are already contained in the papers of Geheniau and Debever [Ref 3] and P.I. Petrov [Ref 4]. The present paper, however, gives simpler and clearer formulations of the final results. The consideration is performed for a Riemannian space with the signature 2, but the given invariants remain independent for an arbitrary signature.

ASSOCIATION: There are 4 references, 3 of which are Soviet, and 1 Belgian. Kazanskiy gosudarstvennyy universitet imeni V.I. Ul'yanova-Lenina (Kazan' State University imeni V.I. Ul'yanov-Lenin)

SUBMITTED: January 17, 1959  
Card 1/1

DRANNIKOV, Abram Markovich, prof., doktor geo<sup>1</sup>.-min. nauk;  
VISHNEVYY, V.V., red.; LEUSHCHENKO, M.L., tekhn. red.

[Engineering geology] Inzhenernaia geologiya. Izd.2.,  
dop. i ispr. Kiev, Gosstroizdat USSR, 1964. 254 p.  
(MIRA 17:3)



KIRICHENKO, F. G.; IL'ICHEVA, N. V.; VISHNEVSKIY, V. V.

Ukraine - Wheat

Selection of wheat varieties for irrigation conditions in the southern Ukraine. Sel. i sem. 20, No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

VISHNEVSKIY, V.Iu., az orvostudomány kandidátusa(Leningrad)

Cholecystography of a normal gallbladder in a child. Gyermekgyo-  
gyászat 11 no.3:72-80 Mr '60.

(CHOLECYSTOGRAPHY in inf & child)

VISHNEVETSKIY, F.Ye.

Application of novocaine block in closed cranial trauma [with  
summary in English, p.63]. Vop.neirokhir. 22 no.2:32-34 M-Ap '58.  
(MIRA 11:4)

1. 2-ya Astrakhanskaya oblastnaya klinicheskaya bol'nitsa.  
(CRANIUM, wds. & inj.  
exper., eff. of procaine block in prev. of cardiac compl.  
(Rus)  
(ANESTHESIA, REGIONAL, effects,  
procaine block on exper. cranial inj. in prev. of cardiac  
compl. (Rus)  
(HEART DISEASE, experimental,  
prod. by cranial inj., prev. by procaine block (Rus)

VISHNEVSKIY, Ye.

Behind a monastery wall (to be concluded). Sov. profsoyuzy  
18 no.4:38-40 F '62. (MIRA 15:3)  
(Pechora--Monasteries)

VITAL'YEV, N.; BELOBORODOV, V., shturman (Penza); VISHNEVSKIY, Ye. (Baku)

By telephone and telegraph from airplanes. Grazhd.av. 29 no.12:13  
D '63. (MIRA 17:2)

VISHNEVSKIY, Ye.

Behind a monastery wall. Sov. profsoiuzy 18 no.5:35-37 Mr  
'62. (MIRA 15:3)  
(Pechora--Monasteries)

VISHNEVSKIY, Ye. (g.Severo-Zadonsk, Tul'skoy obl.); TSIOMENKO, V.  
(g.Severo-Zadonsk, Tul'skoy obl.)

They take an interest in everything. Sov.shakht. 10 no.12:26  
D '61. (MIRA 14:12)  
(Communist Youth League)

VISHNEVSKIY, Ye. I.

Ye. I. Vishnevskiy and S. L. Gekhtman (Mekhanobr)

"The beneficiation of cassiterite-containing ores"

report presented at the 4th Scientific and Technical Session of the Mekhanobr  
Inst, Leningrad, 15-18 July 1958



IZRAITEL', S.A., otv. red.; SKURAT, V.K., otv. red.; ZUBAREV, S.N., otv. red.; MOISEYEV, S.L., otv. red.; ASTAF'YEVA, A.V., kand. tekhn. nauk, red.; VAS'KOVSKIY, Ye.L., red.; VISHNEVSKIY, Ye.L., red.; KRIVTSOV, B.S., red.; KOROTKIN, I.N., red.; MITROFANOV, S.I., doktor tekhn. nauk, red.; NORKIN, V.V., kand. tekhn. nauk, red.; NIKITIN, A.A., red.; RUDNEV, A.P., red.; SLASTUNOV, V.G., red.; TKACHEV, F.A., red.; RAUKHVARGER, Ye.L., kand. tekhn. nauk, red.; FEOKTISTOV, A.T.[deceased], red.; ZAYTSEV, A.P., red.

[Safety regulations for the dressing and sintering of ferrous and nonferrous metal ores] Pravila bezopasnosti pri obogashchenii i aglomeratsii rud tsvetnykh i chernykh metallov. Moskva, Nedra, 1964. 106 p. (MIRA 18:4)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennyy komitet po nadzoru za bezopasnym vedeniyem v promyshlennosti i gornomu nadzoru.

VISHNEVSKIY, Ye.N.; GREHTMAN, S.L.

Efficient flowsheet for the dressing of tin-containing complex  
ores. Obog.rud 3 no.4:3-8 '58. (MIRA 12:2)  
(Tin ores) (Ore dressing)

VISHNEVSKIY, Ye.N.; STREL'TSYN, V.G.

Crushing and grinding of stanniferous ores before gravity  
concentration. Obog. rud 9 no.4:11-17 '64.

(MIRA 18:5)

VISHNEVSKIY, Ye.N.

Classification of tin-bearing ores by their beneficiation properties.  
Obog. rud 7 no.2:11-16 '62. (MIRA 16:4)

(Tin ores)

(Ore dressing)

S/137/62/000/003/039/191  
A006/A101

AUTHORS: Vishnevskiy, Ye. N., Yeskin, S. I.

TITLE: Combined methods of processing complex oxidized tin-containing ores

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 13, abstract 3088  
("Obogashcheniye rud", 1961, no. 2, (32) 10 - 16)

TEXT: The authors present some preliminary results of investigations on the extraction of Pb, Cu, Zn and Bi from "stable" oxidized Sn-containing ores. The characteristic feature of the ores investigated is the fact that they are in a state of particularly strong decomposition: the clay content attains in individual samples >50%. The basic component of these ores are Fe and Mn hydroxides and silicates. Laboratory tests show that Cu, Pb and Bi can be successfully separated-out according to methods which include both roasting and flotation of the roasted products. For Cu and Bi reduction roasting is most effective in the presence of small chlorine amounts (roasting time is 20 - 30 minutes, consumption of salt is 0.5 - 1.5%; of coal 1 - 1.5%) for Pb extraction sulfidizing roasting is most suitable (temperature about 800°C, pyrite consumption 10 - 15%). Pb extraction

Card 1/2

Combined methods of processing complex...

S/137/62/000/003/039/191

A006/A101

is 68 - 81% at 36 - 42% content in the concentrate. Cu extraction is 79 - 87% at 20 - 29% content. Sn remains almost fully in the flotation tails.

A. Shmeleva

[Abstracter's note: Complete translation]

✓

Card 2/2

L 19322-63

ACCESSION NR: AR3005869

EWI(q)/EWI(m)/BDS AFFTC JD

S/0271/63/000/007/2034/2035

SOURCE: RZh. Avtomatika, telemekhanika i vy\*chislitel'naya tekhnika, Abs. 7 Bl78

AUTHOR: Vishnevskiy, Ye. V.; Pyankov, Yu. A.

TITLE: The calculation of oscillating regions in a ferromagnetic film parametron

CITED SOURCE: Sb. Vy\*chisl. sistemy\*. Vy\*p. 2. Novosibirsk, 1962, 24-30

TOPIC TAGS: parametron, ferromagnetic film parametron

TRANSLATION: The calculations were made by means of a system of equations which was reduced to a single differential equation if it is assumed that the winding of the parametron covers the film completely and that losses in the winding and the capacitance of the parametron can be neglected. The equation obtained in this way was solved on an electronic digital computer by Euler's method. A number of the parameters in the equation were varied in the course of the solution. The author presents graphs of the obtained relationships which can be used as guides in solving ferromagnetic film parametrons. There are nine illustrations. G. V.

DATE ACQ: 15Aug63

SUB CODE: GE, MM

ENCL: 00

Card 1/1

VISHNEVSKIY, Ye.V.; P'YANOV, Yu.A.

Calculation of the areas of oscillations in a parametron with  
a ferromagnetic film. Vych. sist. no.2:24-30 '62.

(MIRA 18:2)



VISHNEVSKIY, Ye.Ye.

Pulse method for determining the thermal characteristics of  
moist materials. Trudy NIKPI no.2:73-90 '58.  
(MIRA 13:5)

(Heat--Transmission)

VISHNEVSKIY, Yu.B.

Clinical variations of allergic reactions in children caused by penicillin. *Pediatrics* no.8:78-83 '62. (MIRA 15:10)

1. Iz kafedry detskikh bolezney Voenno-meditsinskoy akademii imeni S.M.Kirova (nachal'nik - deystvitel'nyy chlen AMN SSSR prof. M.S.Maslov [deceased] i Okruzhnogo voyennogo gosptalya (nachal'nik N.I.Tarasenko).

(PENICILLIN--TOXICOLOGY)

(ALLERGY)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860110002-2

SECRET, Vol 3

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860110002-2"

USSR/Medicine - Physiology

FD-2786

Card 1/1                      Pub 154-7/19

Author                        : Vishnevskiy, Yu. B.

Title                         : Change in the content of bromine in the blood of rheumatic children in relation to disturbances of their higher nervous activity

Periodical                    : Zhur. vys. nerv. deyat. 5, 211-218, Mar-Apr 1955

Abstract                      : Investigated the variation in the content of bromine in the blood of 33 rheumatic children, ranging in age from 5 1/2 to 15 years, in relation to disturbances in the relationship between the stimulatory and inhibitory processes in the cerebral cortex, at various stages in the development and course of the rheumatic process. Tables; graphs. Five references, all USSR (4 since 1940).

Institution                   : Chair of Children's Diseases of the Military-Medical Academy imeni S. M. Kirov.

Submitted                     : September 28, 1954

VISHNEVSKIY, Yu.B., kandidat meditsinskikh nauk (Leningrad)

Discussion on N.M. Davydov's article, "Prolonged phlebotensimetry  
and its clinical value in mitral stenosis." Terap. arkh. 27 no.6:  
81-84 '55. (MLRA 9:2)

(MITRAL STENOSIS, physiology,  
phlebotonometry)

VISHNEVSKI, YU. B.

Accumulation of bromine in the blood and its subsequent elimination in children in dependence on intake of various doses of sodium bromide. Yu. B. Vishnevskii (S. M. Klov Military Med. Acad., Leningrad). *Fiziol. Zhur. S.S.S.R.* 41, 525-31 (1955)—Daily administration of NaBr to children at doses above 0.6 g. results in a peaked curve of Br concn. in the blood, the peak being higher with higher doses; this occurs during the 1-3 days immediately after the initiation of the expt. At very high doses (4-8 g.) the peak is reached somewhat later and the decline is irregular. Individual variations are great. Very long administration of high-dose levels usually leads to considerably reduced tendency for Br to accumulate further in the blood, owing possibly to deposition of Br in the tissues, particularly the nervous system. G. M. Kosolapoff

VISHNEVSKIY, Yu.B.

True (cross) transposition of the large vessels in children. Vop.  
okh.nat. i det. 4 no.4:85-88 J1-Ag '59. (MIRA 12:12)

1. Iz kafedry detskikh bolezney (nach. - deystvitel'nyy chlen AMN  
SSSR, zasluzhennyy deyatel' nauki, prof. M.S. Maslov) Voenno-medi-  
tsinskoy ordena Lenina akademii imeni S.M. Kirova i detskogo otdele-  
niya (nach. - kand.med.nauk Yu.B. Vishnevskiy) Okruzhnogo voyennogo  
gospitalya (nach. G.M. Golub).

(CORONARY VESSELS--ABNORMALITIES AND DEFORMITIES)

VISHNEVSKIY, Yu.B., kand.med.nauk

Cholecystographic picture of the normally functioning gall bladder in children. Vop.okh.mat.i det. 4 no.6:33-39 N-D '59.

(MIRA 13:4)

1. Iz kafedry detskikh bolezney Voenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova (nachal'nik - deystvitel'nyy chlen AMN SSSR prof. M.S. Maslov) i okruzhnogo voyennogo gosptalya (nachal'nik G.M. Golub).

(GALL BLADDER--RADIOGRAPHY)



SOKOLOVA-PONOMAREVA, Olga Dmitriyevna, prof.; BISHARINA, Valentina  
Pavlovna, prof.; VISHNEVSKIY, Yu.B., red.

[Prescription manual for the pediatrician] Retsepturnyi  
spravochnik detskogo vracha. 5. izd., perer. i dop.  
Leningrad, Meditsina, 1964. 365 p. (MIRA 17:11)

VISHNEVSKIY, Yu.B., kand.med.nauk

Anaphylactic reaction to penicillin. Klin.med. 38 no.3:128-129  
Mr'60. (MIRA 16:7)

(ANAPHYLAXIS) (PENICILLIN—TOXICOLOGY)

VISHNEVSKIY, Yu.B., kand.med.nauk; KRINITSKIY, A.F.

Clinical evaluation of the various methods of studying gastric acidity  
in children with catheterization. Sov.med. 25 no.1:99-105 Ja '62.  
(MIRA 15:4)

1.Iz kafedry detskikh bolezney Voenno-meditsinskoy akademii imeni  
S.M.Kirova (nachal'nik - deystvitel'nyy chlen AMN SSSR prof.  
M.S.Maslov [deceased]) i Okruzhnogo voyennogo gosptalya (nachal'nik  
V.F. Borozenko).

(GASTRIC JUICE)

VISHNEVSKIY, Yu.B., kand.med.nauk

So-called infectious eosinophilosis. *Pediatrics* no.7:43-47  
'61. (MIRA 14:9)

1. Iz kafedry detskikh bolezney Voenno-meditsinskoy akademii  
imeni S.M. Kirova (nach. - deystvitel'nyy chlen AMN SSSR prof.  
M.S. Maslov) i Okruzhnogo voyennogo gospihalya (nach. I.N.  
Tarasenko).

(EOSINOPHILES)

VISHNEVSKIY, Yu.S. [Vyshenevs'kiy, I.U.S.]; SHIROKOV, B.G. [Shyrokov, B.H.]

Manufacture of chrome leather by the liming method without  
coating. Leh. prem. no.4:24-25 O.D. '62. (MIRA 16:5)

1. Nikolayevskiy kozhevenno-obuvnoy kombinat (for Vishnevskiy).
2. Ukrainskiy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy promyshlennosti (for Shirokov).

VISHNEVSKIY, Ye. Ye.

5(4)

PHASE I BOOK EXPLOITATION

80W/1A35

Akademiya nauk SSSR. Energeticheskiy Institut

Teplota i massoperehod v protsessakh ispareniya (Heat- and Mass-Transfer in Evaporation Processes) Moscow, Izd-vo AN SSSR, 1958. 254 p. 5,000 copies printed.

Resp. Ed.: Lykov, A.V., Academician, USSR Academy of Sciences; Eds. of Publishing House: Tal', A.A. and Smirnov, V.A.

PURPOSE: This book is intended for scientists and engineers in heat engineering and chemical technology and for students and teachers of higher educational institutions in these fields.

COVERAGE: This collection contains articles relating to analytical and experimental investigations of heat- and mass-transfer under conditions of phase and chemical transformations. A new method of solving unsteady-state heat-flow problems is presented. Methods of determining heat- and mass-transfer coefficients during the heating and drying of a composite substance are given. New experimental principles of surface heat- and mass-transfer in vaporization processes are explained and new

Card 1/5

Vishnevskiy, Ye. Ye. Methods of Determining the Thermal Characteristics of  
Combustible Materials

F36

VISHNEVSKIY, Z.A.; BARINOVA, O.N., red.; TRUSOV, N.S., tekhn. red.

[Repair of cameras] Remont fotoapparatov. Moskva, Gosbyt-  
izdat, 1963. 205 p. (MIRA 16:12)  
(Cameras—Maintenance and repair)

VISHNEVSKIY, Zakhar Arkad'yevich; ZHUROV, V..., retsenzent;  
BARINOVA, O.N., red.

[Repair of amateur motion-pictures] Remont liubitel'-  
skikh kinos"emochnykh kamer. Moskva, Legkaia industriia,  
1965. 186 p. (MIRA 18:2)



BIRYUKOV, Pavel Fedorovich; DOTLIBOV, Arkadiy Mikhaylovich; ROMANETS,  
Tat'yana Yaropolkovna; EPSHTEYN, Vladimir L'evich;  
VISHNEVYY, V., red.; YEREMINA, I., tekhn.red.

[Freestanding reinforced-concrete bathrooms; their manufacture  
and use] Nenesushchie zhelezobetonnye prostranstvennye sanitarno-  
tekhnicheskie kabiny; opyt izgotovleniia i primeneniia. Kiev,  
Gosstroizdat, 1963. 37 p. (MIRA 16:6)  
(Bathrooms)

BOL'SHAKOV, Valeriy Alekseyevich, kand. tekhn. nauk; GORILKIN,  
Anatoliy Vasil'yevich, kand. tekhn. nauk, dots.;  
KONSTANTINOV, Yuriy Mikhaylovich, inzh.; KRASHITSKIY,  
Mikhail Sergeyevich, kand. tekhn. nauk, dots.; POPOV,  
Vladimir Nikolayevich, kand. tekhn. nauk, dots.; Prini-  
mal uchastiye DENISENKO, I.D., inzh.; VISHNEVYY, V.V.,  
red.

[Collection of problems in hydraulics] Sbornik zadach po  
gidravlike. [By] V.A.Bol'shakov i dr. Kiev, Budivel' k,  
1964. 291 p. AIRA 17 9

YEKEL'CHIK, Moisey Solomonovich; VISHNEVYY, V.V., red.; YEREMINA,  
I.A., tekhn. red.

[Concise handbook for the superintendant of construction  
operations] Kratkii spravochnik proizvoditelia stroitel'-  
nykh rabot. Izd.2., perer. i dop. Kiev, Gosstroizdat  
USSR, 1963. 668 p. (MIRA 16:8)  
(Construction industry--Handbooks, manuals, etc.)

GRIN', Igor' Mikhaylovich[Hrin', I.M.], dots.; ALEKSANDROVSKIY, O.Ya.  
[Aleksandrovs'kiy, O.IA.], red.; VISHNEVYY, V.V.[Vyshnevyy,  
V.V.], red.; BABIL'CHANOVA, G.O.[Babil'chanova, H.O.], tekhn.  
red.

[Wooden elements]Derev'iani konstruktsii. Kyiv, Derzhbudvydav  
URSR, 1962. 237 p. (MIRA 16:3)  
(Building, Wooden)

VISHNIK, M.I.

16(0) PHASE I BOOK EXPLOITATION SOV/3177  
 Matematika v SSSR za 40 let, 1917-1957, tom I: Osnovnye stat'i  
 (Mathematics in the USSR for Forty Years, 1917-1957), Vol. I:  
 Review Articles) Moscow, Fizmatgiz, 1959. 1002 p. 5,500 copies  
 printed.

Eds: A. G. Kurosh, (Chief Ed.), V. I. Smirnov, V. G. Boltyanskii,  
 Ye. P. Dynkin, O. Ye. Shilova, and A. P. Yushkevich; Ed. (Inside  
 book): A. P. Lapko; Tech. Ed.: S. M. Anisimov.

PURPOSE: This book is intended for mathematicians and historians  
 of mathematics interested in Soviet contributions to the field.

COVERAGE: This book is Volume I of a major 2-volume work on the  
 history of Soviet mathematics. Volume I surveys the chief con-  
 tributions made by Soviet mathematicians during the period 1917-  
 1957; Volume II will contain a bibliography of major works since  
 1917 and biographic sketches of some of the leading mathema-  
 ticians. This work follows the tradition set by two earlier  
 works: Matematika v SSSR za prinyadstat' let (Mathematics in  
 the USSR for 15 Years) and Matematika v SSSR za tridtsat' let  
 (Mathematics in the USSR for 30 Years). The book is divided  
 into the major divisions of the field, i.e., algebra, topology,  
 theory of probabilities, functional analysis, etc., and con-  
 tributions and outstanding problems in each discussed. A list-  
 ing of some 1400 Soviet mathematicians is included with refer-  
 ences to their contributions in the field.

Vishnik, M. I., A. D. Myshkis, and O. A. Oleynik, Partial  
 Differential Equations

Ch. I. Elliptic-type Equations  
 1. Classical equations of mathematical physics  
 2. Linear elliptic equations of the second order  
 3. Elliptic equations of the plane  
 4. Solution of boundary value problems by means of  
 integral equations  
 5. Embedding theorems  
 6. Variational methods of solving boundary value problems  
 7. Non-self-conjugate problems  
 8. Relaxation methods for elliptic type equations  
 9. Nonlinear elliptic-type equations  
 10. Degenerate cases

Ch. II. Hyperbolic and Parabolic-type Equations  
 1. Classical equations of mathematical physics  
 2. Cauchy's problem for linear equations  
 3. Mixed boundary value problems for linear equations  
 4. Variational methods for nonstationary equations  
 5. Nonlinear equations  
 6. Degenerate cases  
 7. Nonstationary equations and systems not pertaining  
 to classical types. Various studies

Ch. III. Other Problems  
 Lyusternik, L. A. Variational Calculus  
 1. Introduction  
 2. One dimensional problems  
 3. Multidimensional problems  
 4. Variational theory of general nonlinear operators  
 5. Topological methods of the theory of critical points  
 6. Variational calculus in the large and the topology of  
 functional spaces  
 7. Variational methods of solving problems in physics  
 and engineering

VISHNIKIN, Aleksandr Ivanovich, aspirant

Conversion of the equivalent circuit of an asynchronous motor  
with power supply by an a.c. network. Izv. vys. ucheb. zav.;  
elektromekh. 3 no.6:73-87 '60. (MIRA 15:5)

1. Kafedra elektricheskikh mashin Kiyevskogo politekhnicheskogo  
instituta.

(Electric motors, Induction)  
(Equivalent circuits)

VISHNIKIN, ALEKSANDR IVANOVICH, aspirant

Method for calculating the work characteristics of an asynchronous motor operating in the presence of frequency variations. Izv. vys. ucheb. zav.; elektromekh. 4 no.7:26-40 '61. (MIRA 14:7)

1. Kafedra elektricheskikh mashin Kiyevskogo politekhnicheskogo instituta.

(Electric motors, Induction)

VISHNIOVSKAYA, A.A.

Yeliseyev, V.G. and Vishniorskaya, A.A. "The influence of repeated injections of 'tirocoidin' on the reactivity of the cell elements of the connective tissues of the white rat", Trudy Omskogo med. in-ta im. Kalinina, No. 12, 1948, p.121-30.

SO: U-3042, 11 March 53, (Letopis 'zhurnal 'nykh Statey, No. 7 1949).



BARTENEV, G.M.; VISHNITSKAYA, L.A.

Comparison of various equations for the deformation of  
network polymers with experimental data. Vysokom.soed.  
4 no.9:1324-1332 S '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut rezinovoy  
promyshlennosti i Problemnaya laboratoriya fiziki  
polimerov Moskovskogo gosudarstvennogo pedagogicheskogo  
instituta imeni V.I. Lenina.

(Polymers)  
(Elastomers--Testing)

BARTENEV, G.M.; VISNICKAJA, L.A. [Vishnitskaya, L.A.]

Effect of temperature on the relaxation property of  
rubber polymers. Chem prum 13 no.2:97-99 F '63.

1. Vedeckovyzkumny ustav gumarenskeho prumyslu, Moskva.

BARTANEV, G.M.; VISHNITSKAYA, L.A.

Rheological properties of polyisobutylene. Vysokom. soed. 6  
no.4:751-757 Ap '64. (MIRA 17:6)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut imeni  
V.I. Lenina; Nauchno-issledovatel'skiy institut rezinovoy  
promyshlennosti.

s/0190/64/006/004/0751/0757

ACCESSION NR: APL032578

AUTHORS: Bartenev, G. M.; Vishnitskaya, L. A.

TITLE: Rheological properties of polyisobutylene

SOURCE: Vyssokomolek. soedin., v. 6, no. 4, 1964, 751-757

TOPIC TAGS: shearing stress, rheology, viscosity, shear deformation, high molecular weight, polyisobutylene

ABSTRACT: New data were presented on the shearing stress and the temperature effects on the viscosity of high-molecular weight (900 000) polyisobutylene (PIB). The shear stress varied between 0.01 and 1 kg/cm<sup>2</sup> and the temperature range from 20 to 140°C. The shear deformation rates  $d\gamma/dt$  show a sharp drop in value with time for small loads (0.014), but they show an equally sharp rise after the drop for the heavy load (1.0 kg/cm<sup>2</sup>) cases. Several empirical and analytical expressions are given relating  $d\gamma/dt$  to the shear load P, e.g.,

$$\left( \frac{d\gamma}{dt} \right) = (P/\eta_0) e^{aP},$$

and an expression for the viscosity of PIB as a function of the load P

Card 1/2

ACCESSION NR: AP4032578

$$\eta = \eta_0 e^{-\alpha p},$$

compared to the data obtained experimentally. The results indicate that  $\eta_0$  and  $\alpha$  in the above equation are independent of the temperature. Finally, a rule is formulated specifying the additivity of the logarithm viscosities of linear polymers given by

$$\lg \eta/c = \sum \lg \eta_i(X_i).$$

Orig. art. has: 7 formulas and 5 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy pedagogicheskiy institut im. V. I. Lenina (Moscow State Teachers Institute); Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti (Institute of Scientific Research in the Rubber Industries)

SUBMITTED: 13Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 008

OTHER: 007

Card 2/2

VISHNITSKAYA, L. A.

Jul 50

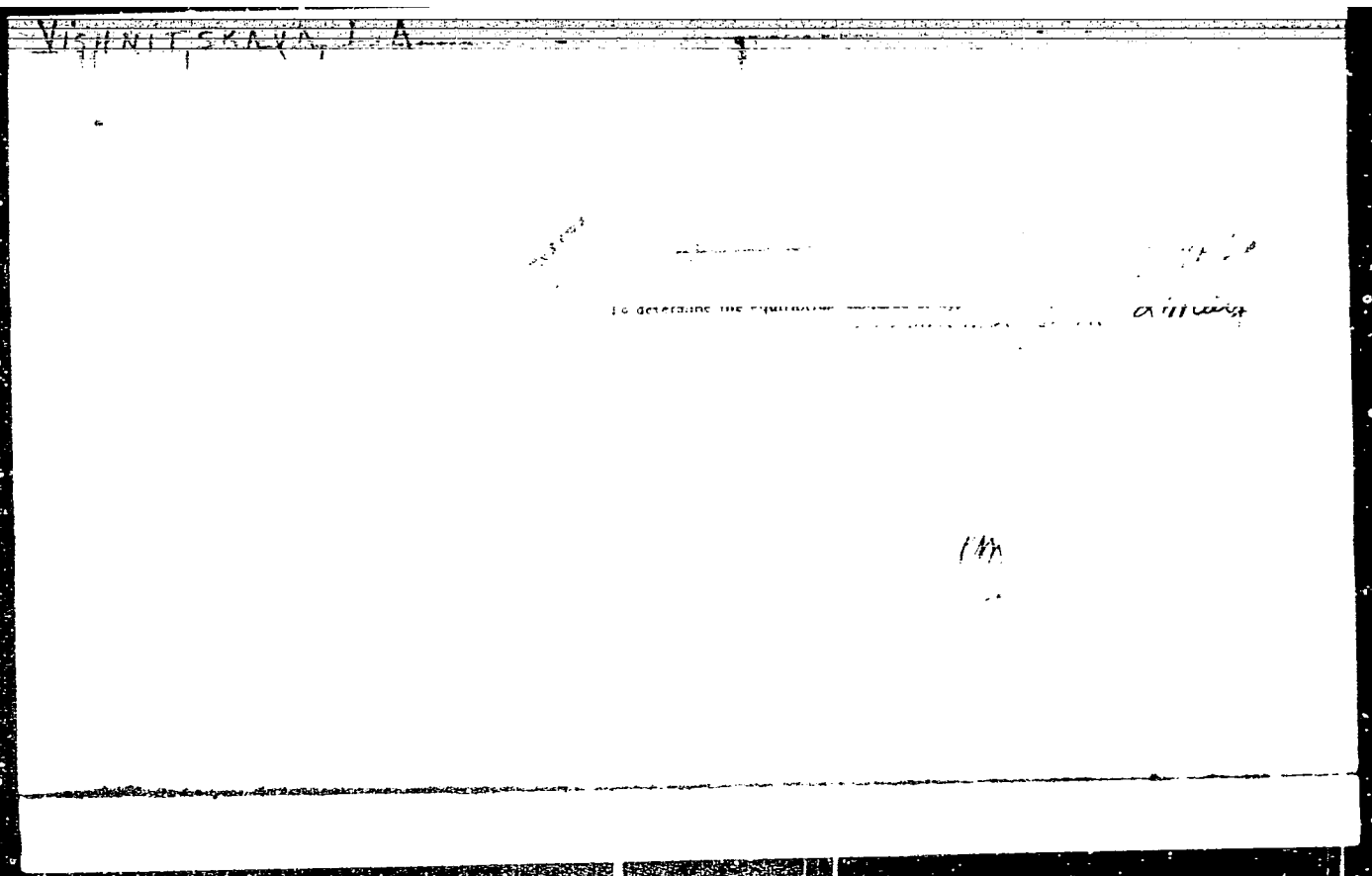
USSR/Physics - Elasticity  
Rubber

"High-Elastic Properties of Noncrystallizing Rubber," G. M. Bartenev, L. A. Vishnitskaya, Chair of Chem and Phys of Rubber, Moscow Inst of Fine Chem Technol imeni Lomonosov

"Zhur Tekh Fiz" Vol XX, No 7, pp 858-865

Describes method for obtaining equilibrium curves of tension, results of measurements on vulcanizers of butadiene styrol rubber, and comparison of theories of high-elastic deformation with experiments. Submitted 18 Mar 49.

PA 164T69







VISHNITSKAYA, L. A.

Vishnitskaya, L. A.

"The effect of caoutchouc and dispersion fillers on the relaxation and equilibrium properties of rubber." Moscow Inst of Fine Chemical Technology imeni M. V. Lomonosov. Sci Res Inst of the Rubber Industry. Moscow, 1956 (Dissertation for the degree of Candidate in Chemical Sciences)

Knizhnaya letopis!  
No. 25, 1956. Moscow

Category : USSR/Atomic and Molecular Physics - Physics of high-molecular substance D-9

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 1007

Author : Bartenev, G.M., Vishnitskaya, L.A.

Inst : Scientific Research Inst. of the Rubber Industry, Moscow

Title : Effect of Dispersed Fillers on the Relaxation Properties of Rubber.

Orig Pub : Kolloid. zh., 1956, 18, No 2, 135-144

Abstract : The relaxation of stresses in filled rubber consists of three processes: relaxation of the chains, relaxation due to the separation of the rubber chains from the filler particles and to the regrouping of the filler particles (relaxation of filler), and chemical relaxation. A prolonged stress relaxation of rubber made of SKS-30 latex with various amounts of active filler (candel lampblack) and inactive filler (chalk) was investigated at a deformation of 100%. It is shown that the relaxation time of the chains and of the chemical relaxation, making it possible to distinguish between these processes. The usually observed relaxation process in rubber with active filler is caused only by the establishment of equilibrium with respect to the chains.

Card : 1/1

BARTENEV, G.M.; VISHNITSKAYA, I.A.

Effect of temperature on the viscosity of fluorine-containing rubber. Vysokom. soed. 7 no.11:1905-1907 N '65.

(MIRA 19:1)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.  
Submitted December 8, 1964.

VISHNITSKAYA, L.A.

Physical properties of rubber made from siloxane and fluorine-  
containing compounds. Kauch. i rez. 23 no.2:17-20 F '64.  
(MIRA 17:3)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.

ACCESSION NR: AP4017163

S/0138/64/000/002/0017/0020

AUTHOR: Vishnitskaya, L. A.

TITLE: Physical properties of rubbers on siloxane and on fluorine-bearing bases

SOURCE: Kauchuk i rezina, no. 2, 1964, 17-20

TOPIC TAGS: rubber, siloxane, fluorine, rubber property, polymer, rubber SKT, rubber SKF, relaxation, impact modulus, impact deformation, dehermetization, expansion coefficient

ABSTRACT: Results of experiments on the physical properties of filled and unfilled rubbers (with siloxane and fluorine-bearing bases) are presented. Relaxation rates, moduli (static, relative-equilibrium, impact), vitrification temperature (static and impact), temperatures of dehermetization and of crystallization, and coefficients of linear expansion were investigated. Rubbers SKT (on siloxane base, unfilled), SKT-n (on siloxane base, titanium-filled), SKF (on fluorine-bearing base, unfilled), and SKF-n (on fluorine-bearing base, carbon-filled) were studied. Relaxation characteristics and the moduli were obtained from the curves of stress relaxation at 20-200C. The relatively slow relaxation rate of rubbers SKT and

Card 1/3

ACCESSION NR: AP4017163

SKT-n increased because of breaking and regrouping of transverse bonds and of rubber-filler bonds (also of intermolecular bonds in SKF). For SKF-n the relaxation rate was found to be independent of temperature up to 200C. Relative-equilibrium moduli for SKT and SKF are also independent of temperature, while for the filled rubbers they decrease as the temperature rises. For SKF-n this modulus at 200C is lower than for the corresponding unfilled rubber. The same relationship is true for the static moduli because of the instability of the SKF-carbon black resistant bonds than those of SKF-gas black. When the temperature was lowered below 220C the impact modulus increased, slowly at first, then more rapidly. The temperature at which the change occurred was different for each rubber, and it is higher for SKT and SKT-n than for SKF and SKF-n. Impact moduli are higher for the filled than for the unfilled rubbers. In all cases the temperature of structural vitrification was found to be lower than the temperature of mechanical vitrification. In the interval 0-125C the coefficient of linear expansion in siloxane rubbers changed twice, while in the fluorine rubbers it changed only once. The dual change in the former type is explained by these rubbers passing from the amorphous state into a partially crystalline and then into a vitreous state. Temperatures of crystallisation and vitrification are lower for the unfilled rubbers than for the filled ones. Temperatures of dehermetization are independent of

Card 2/3

ACCESSION NR: AP4017163

compression within the range of 10-30%. It varies as shown below.

Rubber	Temperature of dehermetization, C
SKT . . . . .	76.0
SKT-n . . . . .	57.6
SKF . . . . .	24.5

Orig. art. has: 5 graphs and 1 table.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti  
(Scientific Research Institute of the Rubber Industry)

SUBMITTED: 00

DATE ACQ: 23Mar64

ENCL: 00

SUB CODE: MA

NO REF SOV: 008

OTHER: 001

Card 3/3

BARTENEV, G.M.; VISHNITSKAYA, L.A.

Study of the flow of rubberlike polymers by constant rate stretching. Vysokom. soed. 5 no.12:1837-1842 D '63.

(MIRA 17:1)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti i Moskovskiy gosudarstvennyy pedagogicheskiy institut.



Z/009/63/000/002/002/004  
E112/E492

AUTHORS: Bartenev, G.M., Vishnitskaya, L.A.

TITLE: Effects of temperature on the relaxation properties of rubber elastomers

PERIODICAL: Chemický průmysl, no.2, 1963, 97-99

TEXT: Non-filled vulcanizates from natural, butyl, butadiene-nitrile, butadiene and butadiene-styrene rubbers were tested for sudden stress relaxation properties at 20 and 70°C. Stress relaxation at 20°C is closely connected with the chemical structure of the elastomer. The shortest relaxation periods were shown by natural and butyl rubber, while butadiene-nitrile rubbers took the longest. Butadiene and butadiene-styrene rubbers had intermediate values. Relaxation curves were in agreement with the heats of transition of the second order: increase of irregularity of structure, presence of bulky side-chains and polar groups tend to suppress the rearrangement of the elastomer molecules and retard chain relaxation. Stress-relaxation curves at 70°C were entirely different, showing increased relaxation rates, generally about 10 times greater than at 20°C. The stress-relaxation  
Card 1/2

Effects of temperature ...

Z/009/63/000/002/002/004

E112/2492

curves at 70°C are practically identical for all types of rubber. One can conclude that the rate of chemical bond fission is the same for all rubbers at 70°C. A novel method of plotting the relaxation curves is presented, permitting to establish relaxation equilibria. There are 5 figures.

ASSOCIATION: Vědeckovýzkumný ústav gumárenského průmyslu, Moskva  
(Scientific Research Institute of the Rubber  
Industry, Moscow)

SUBMITTED: August 1, 1962

Card 2/2

S/190/62/004/009/004/014  
B101/B144

AUTHORS: Bartenev, G. M., Vishnitskaya, L. A.

TITLE: Comparison of various equations for the deformation of cross-linked polymers with the experiment

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 9, 1962, 1324-1332

TEXT: A comparison between the published and the experimental data for uncompounded rubbers gave the following results: (1) Up to 30% elongation, the equation of the statistic deformation theory  $\sigma = G(\lambda^2 - 1/\lambda)$  is valid, where  $\sigma$  is the true stress,  $G$  is the shear modulus, and  $\lambda$  is the degree of elongation. (2) Up to 100% elongation, the following single parameter deformation equations apply:  $\sigma = E_\infty(\lambda - 1)$ , where  $E_\infty$  is the equilibrium modulus of high elasticity, and  $\sigma = A(\lambda - 1/\sqrt{\lambda})$ , where  $A$  is a constant proportional to the absolute temperature and dependent on the type of rubber and density of network. The elasticity potential  $\psi = A(\lambda_1 + \lambda_2 + \lambda_3 - 3)$  corresponds to the second equation, which therefore is preferable. (3) Equilibrium stretching below the point of rupture is adequately described by the two-parameter equations of M. Mooney (J. Appl. Phys., 11, 582, Card 1/2) ✓

Comparison of various equations...

S/190/62/004/009/004/014  
B101/B144

1940), G. M. Martin, F. L. Roth, R. D. Stiehler (Trans. Inst. Rubber Industr., 32, 189, 1956) and by the following equation due to G. M. Bartenev, T. N. Khazanovich (Vysokomolek. soyed., 2, 20, 1960):  

$$\sigma = A(\lambda - 1/\sqrt{\lambda})[1 + B(\lambda^2 + 2/\lambda) + 2B(\lambda + 1/\sqrt{\lambda})(\lambda + 2/\sqrt{\lambda} - 3)]$$
, where A and B are determined by experiment. There are 8 figures and 2 tables.

ASSOCIATION: NII rezinovoy promyshlennosti (NII of the Rubber Industry).  
 Problemnaya laboratoriya fiziki polimerov MGPI im. V. I. Lenina (Problem Laboratory of Polymer Physics of the MGPI imeni V. I. Lenin)

SUBMITTED: May 20, 1961

Card 2/2

BARTENEV, G.M. (Moskva); VISHNITSKAYA, L.A. (Moskva)

Law of deformations for highly elastic materials. Izv.  
AN SSSR. Otd. tekhn. nauk i mashinostr. no. 4:175-177 J1-Ag  
'61. (MIRA 14:8)  
(Deformations (Mechanics))

5(4)

SOV/69-21-3-24/25

AUTHOR: Vishnitskaya, L.A.

TITLE: On the Computation of the Number of Nodes of the Space Lattice of Elastomers

PERIODICAL: Kolloidnyy zhurnal, 1959, Vol XXI, Nr 3, pp 370-373 (USSR)

ABSTRACT: The author reports on her computations of the segment length of various rubber molecules, which are based on the assumption of a dependence (in a proportion of 2 to 3) of the equilibrium modulus  $E_{\infty}$  on the number of chains per unit volume of a lattice polymer. From the space lattice deformation theory (see references 1-5) the author deduces the possibility to use the mechanical method for the investigation of the structure (including its changes as due to chemical processes) of polymer space lattices. The essence of the method lies in the measuring of the equilibrium modulus  $E_{\infty}$ , whose value characterizes the density of the space lattice, i.e. the number of chains or the

Card 1/3

SOV/69-21-3-24/25

On the Computation of the Number of Nodes of the Space Lattice of Elastomers

number of nodes per unit volume ( $N$  or  $N/2$ ). The computations of the statistical molecule segment lengths of rubber (NK, SKS-30A, SKS-30, SKN-40, SKN-26, SKN-18, butyl rubber and SKB) were carried out on the basis of the Bartenev formula. The obtained data are in agreement with the experimental data of W.Kuhn, R. Stein (Soviet scientist) and A. Tobolskiy (Soviet scientist). In order to render possible the computation of the chain number per unit volume of a space polymer, the author has presented the values of constant  $C$  for the investigated rubbers. He expresses his gratitude for the help of Professor G.M. Bartenev. There are 4 graphs and 17 references, 9 of which are Soviet, 7 English and 1 German.

Card 2/3

SOV/69-21-3-24/25  
On the Computation of the Number of Nodes of the Space Lattice of  
Elastomers

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovoy promysh-  
lennosti, Moskva (Scientific Research Institute of  
the Rubber Industry, Moscow)

SUBMITTED: 8 April, 1959

Card 3/3



L 27313-66 EWT(m)/EWP(j)/i IJP(c) RM

ACC NR: AP6008970 SOURCE CODE: UR/0190/65/007/011/1905/1907

AUTHORS: Bartenev, G. M.; Vishnitskaya, L. A. 33

ORG: Scientific Research Institute for the Rubber Industry (Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti) 0

TITLE: Effect of temperature on the viscosity<sup>15</sup> of fluorine-containing rubber 15

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 11, 1965, 1905-1907

TOPIC TAGS: copolymer, rheologic property, polymer rheology, fluorocarbon plastic, rubber

ABSTRACT: This investigation was conducted to determine the rheological properties of the copolymer chlorotrifluoroethylene-vinylidene fluoride over a range of temperatures 20--200C. The experiments were carried out on the pure copolymer and on mixtures of copolymer and carbon black filler<sup>15</sup> in a PK-1 shear apparatus under conditions of constant velocity gradient. The experimental results are presented graphically. It was found that in the temperature region of 90--130C there exists a temperature anomaly in the viscosity of the copolymer as well as in the copolymer filler mixtures. It is suggested that the optimum temperature region for mechanical treatment of fluorine-containing rubbers lies between 80 and 100C. Orig. art. has: 3 graphs. 2

SUB CODE: 11/ SUBM DATE: 08Dec64.

Card 1/1 00 UDC: 678.01:53+678.743

VEROMAN, Viktor Yur'yevich; VISHNITSKIY, A.L., red.

[Strength of tools in electric-spark machining] Stoi-  
kost' instrumenta pri elektroerozionnoi obrabotke. Le-  
ningrad, 1964. 26 p. (MIRA 17:11)

ZHANDAROV, Arkadiy Dmitriyevich; VISHNITSKIY, A.L., red.

[Anode-mechanical polishing] Anodno-mekhanicheskoe polirovanie. Leningrad, 1964. 16 p. (MIRA 17:9)

POPILOV, Lev Yakovlevich; VISHNITSKIY, A.L., red.

[Preparation of samples for test operations using electrophysical and electrochemical techniques; verbatim report of a lecture] Izgotovlenie obraztsov dlia ispytaniy s pomoshch'iu elektrofizicheskikh i elektrokhimicheskikh metodov; stenogramma lektsii. Leningrad, 1963. 46 p.  
(MIRA 17:5)